

53. (New) A membrane localization reagent for directing a molecule to an outer membrane of a cell, wherein the membrane localization reagent is soluble and comprises:

- (1) a lipophilic binding element comprising aliphatic acyl groups;
- (2) a hydrophilic peptide binding element comprising basic amino acids, wherein the hydrophilic binding element is bound to the lipophilic element; and
- (3) a linker for covalently binding the molecule to the hydrophilic peptide binding element of the membrane localization reagent.

54. (New) The membrane localization reagent of claim 53, wherein the hydrophilic peptide binding element comprises lysine residues.

55. (New) The membrane localization reagent of claim 54, wherein the hydrophilic peptide binding element comprises three to ten lysine residues.

56. (New) The membrane localization reagent of claim 54, wherein the

57. (New) The membrane localization reagent of claim 53, wherein the hydrophilic peptide binding element comprises arginine residues.

58. (New) The membrane localization reagent of claim 57, wherein the hydrophilic peptide binding element comprises three to ten arginine residues.

59. (New) The membrane localization reagent of claim 58, wherein the hydrophilic peptide binding element comprises four to seven arginine residues.

60. (New) The membrane localization reagent of claim 53, wherein the hydrophilic peptide binding element is selected from the group consisting of:

(a) DGPKKKKKKSPSKSSG (SEQ ID NO. 37);

(b) GSSKSPSKKKKKKPGD (SEQ ID NO. 39);

(c) SPSNETPKKKKKRFSFKKSSG (SEQ ID NO. 41);

SKDKKKKKKKSKLL

(SEQ ID NO. 42)

61. (New) The membrane localization reagent of claim 60, wherein the hydrophilic peptide binding element comprises GSSKSPSKKKKKKPGD (SEQ ID NO. 39).

62. (New) The membrane localization reagent of claim 53, wherein the lipophilic binding element comprises 8 to 18 methylene units.

63. (New) The membrane localization reagent of claim 62, wherein the lipophilic binding element comprises 10 to 14 methylene units.

64. (New) The membrane localization reagent of claim 61, wherein the lipophilic binding element comprises myristoyl.

65. (New) The membrane localization reagent of claim 63, wherein the

66. (New) The membrane localization reagent according to claim 53, wherein the linker is selected from the group consisting of a cysteine residue; an N-haloacetyl group (where halo signifies chlorine, bromine or iodine); a haloacetyl group (where halo signifies chlorine, bromine or iodine) at an ϵ -amino group of a lysine residue; a bond; an amide group at the C-terminus; an N-terminal blocking group; and a fatty acid N-acyl group at the N-terminus or at an ϵ -amino group of a lysine residue.

67. (New) The membrane localization reagent according to claim 53, wherein the molecule is a therapeutic agent.

68. (New) A soluble compound that is directed to an outer membrane of a cell, wherein the soluble compound comprises:

- (1) a therapeutic agent; and
- (2) a membrane localization reagent, wherein the membrane localization
 - (a) a lipophilic binding element comprising aliphatic acyl groups;

(b) a hydrophilic peptide binding element comprising basic amino acids, wherein the hydrophilic binding element is bound to the lipophilic element; and

(c) a linker that covalently binds the therapeutic agent to the hydrophilic peptide binding element of the membrane localization reagent to form the soluble compound.

69. (New) The soluble compound of claim 68, wherein the hydrophilic peptide binding element comprises lysine residues.

70. (New) The soluble compound of claim 69, wherein the hydrophilic peptide binding element comprises three to ten lysine residues.

71. (New) The soluble compound of claim 70, wherein the hydrophilic peptide binding element comprises four to seven lysine residues.

binding element comprises arginine residues.

73. (New) The soluble compound of claim 72, wherein the hydrophilic peptide binding element comprises three to ten arginine residues.

74. (New) The soluble compound of claim 73, wherein the hydrophilic peptide binding element comprises four to seven arginine residues.

75. (New) The soluble compound of claim 68, wherein the hydrophilic peptide binding element is selected from the group consisting of:

- (a) DGPKKKKKKSPSKSSG (SEQ ID NO.37);
- (b) GSSKSPSKKKKKKPGD (SEQ ID NO. 39);
- (c) SPSNETPKKKKKRFSFKKSSG (SEQ ID NO. 41);
- (d) DGPKKKKKKSPSKSSK (SEQ ID NO. 43); and
- (e) SKDGKKKKKKSKTK (SEQ ID NO. 45).

76. (New) The soluble compound of claim 75, wherein the hydrophilic peptide binding element comprises GSSKSPSKKKKKKPGD (SEQ ID NO. 39)

77. (New) The soluble compound of claim 68, wherein the lipophilic binding element comprises 8 to 18 methylene units.

78. (New) The soluble compound of claim 77, wherein the lipophilic binding element comprises 10 to 14 methylene units.

79. (New) The soluble compound of claim 76, wherein the lipophilic binding element comprises myristoyl.

80. (New) The soluble compound of claim 78, wherein the lipophilic binding element comprises myristoyl.

81. (New) The soluble compound according to claim 68, wherein the linker is selected from the group consisting of a cysteine residue; an N-haloacetyl group (where halo signifies chlorine, bromine or iodine); a haloacetyl group (where halo signifies

group at the C-terminus; an N-terminal blocking group; and a fatty acid N-acyl group at the N-terminus or at an ϵ -amino group of a lysine residue.

82. (New) The soluble compound according to claim 68, wherein the therapeutic agent is selected from the group consisting of an antibody, a complement inhibitor, prourokinase, urokinase, protein C, interferon, leptin, IL-4, streptokinase, and tissue plasminogen activator.

83. (New) The soluble compound according to claim 68, wherein the therapeutic agent comprises Short Consensus Repeats 1-3 of Long Homologous Repeat A of Complement Receptor 1.